



Special Issue on
**Advances in Two-Dimensional Inorganic
Nanomaterials: Synthesis, Characterization, and
Applications**

CALL FOR PAPERS

Two-dimensional (2D) inorganic nanomaterials have drawn tremendous attention over the last decade. Compared to bulk materials, 2D nanomaterials are usually comprised of a single layer or a small number of layers of atomic scale thickness. These materials possess high specific surface area and can provide a variety of novel and superior optical, electrical, thermal, magnetic, or mechanical properties. Current 2D inorganic nanomaterials research has focused on laminar structure materials including graphene (GN), graphene oxide (GO), boron nitride (BN), molybdenum disulfide (MoS_2), and tungsten disulfide (WS_2). Many different methods for the synthesis of 2D nanomaterials have been explored. Top-down (e.g., exfoliation) and bottom-up (e.g., chemical vapor deposition) approaches are widely acknowledged as two main preparation strategies. The intriguing properties of the unique monolayered or few-layered nanomaterials have stimulated research for various applications. Recent advances in potential applications are within the diverse fields of electronics, capacitors, sensors, catalysis, optoelectronics, energy storage/conversion, biomedicine, tissue engineering, and so forth. To appraise the state of the latest research and provide a platform for the future development of the field, we invite investigators to contribute high quality original research articles as well as review articles that will address the state-of-the-art technology and development of 2D inorganic nanomaterials and their various applications.

Authors are strongly encouraged to contact the Guest Editors earlier than this deadline to discuss their proposed research topics and article titles.

Potential topics include, but are not limited to:

- ▶ 2D nanomaterials including GN, GO, BN, MoS_2 , WS_2 , and other layered structure materials with 2D nanoforms and their composites
- ▶ Synthesis, fabrication, processing, structure, characterization, and analysis
- ▶ Optical, electrical, magnetic, thermal, and mechanical properties and applications
- ▶ Energy storage or conversion
- ▶ Additive manufacturing applications
- ▶ Biomedical and tissue engineering research and applications
- ▶ Theoretical simulation and modeling of growth, property, mechanism, and applications

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jnm/atdi/>.

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